

FIG. 1

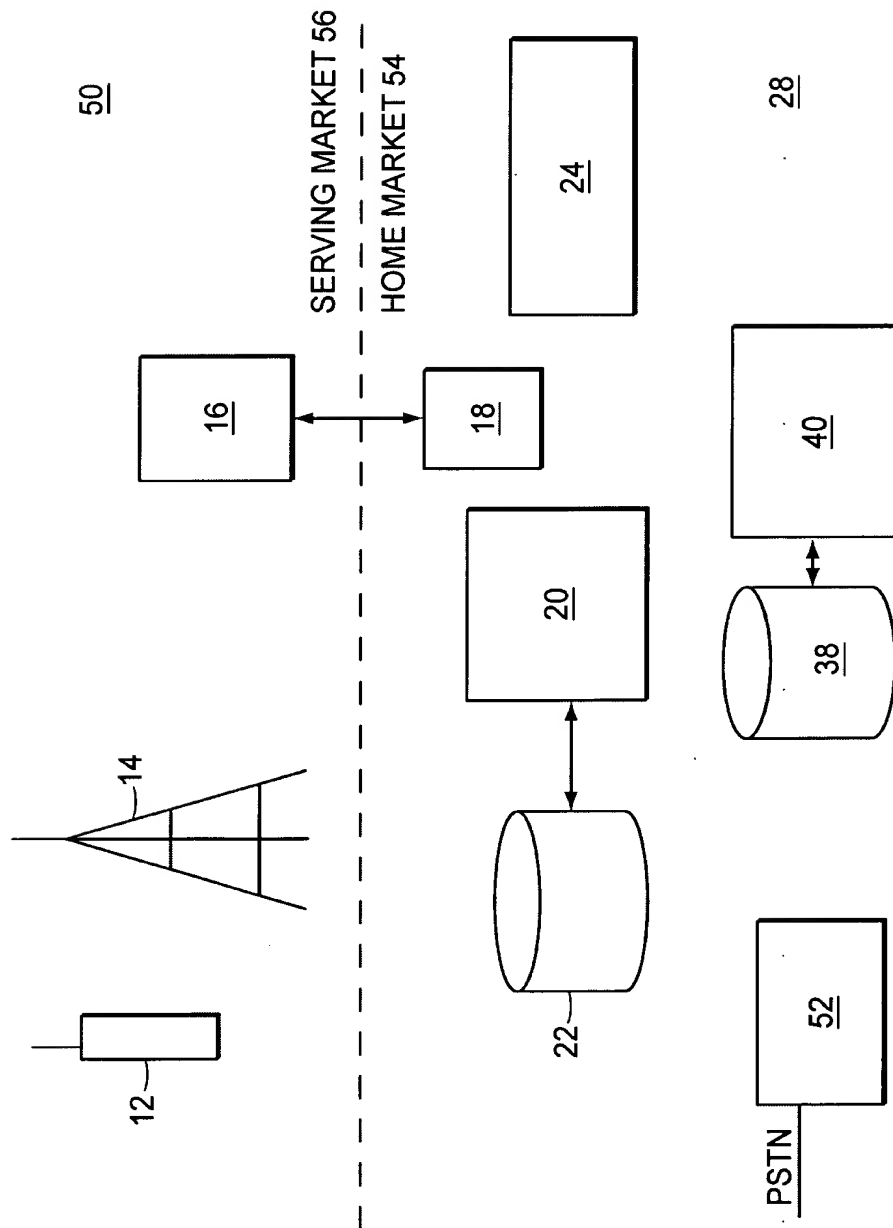


FIG. 2

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Roamer registration and Verification Model

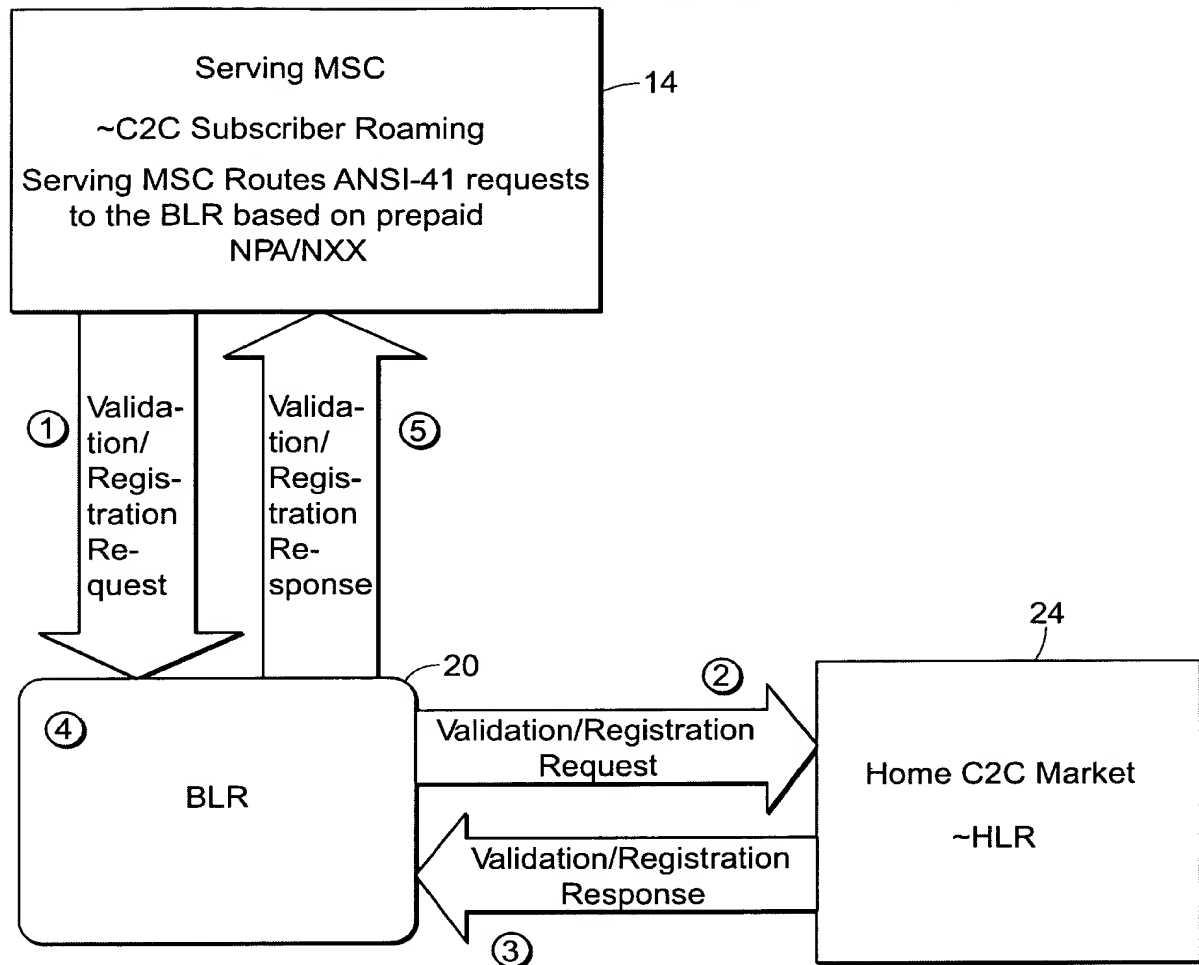
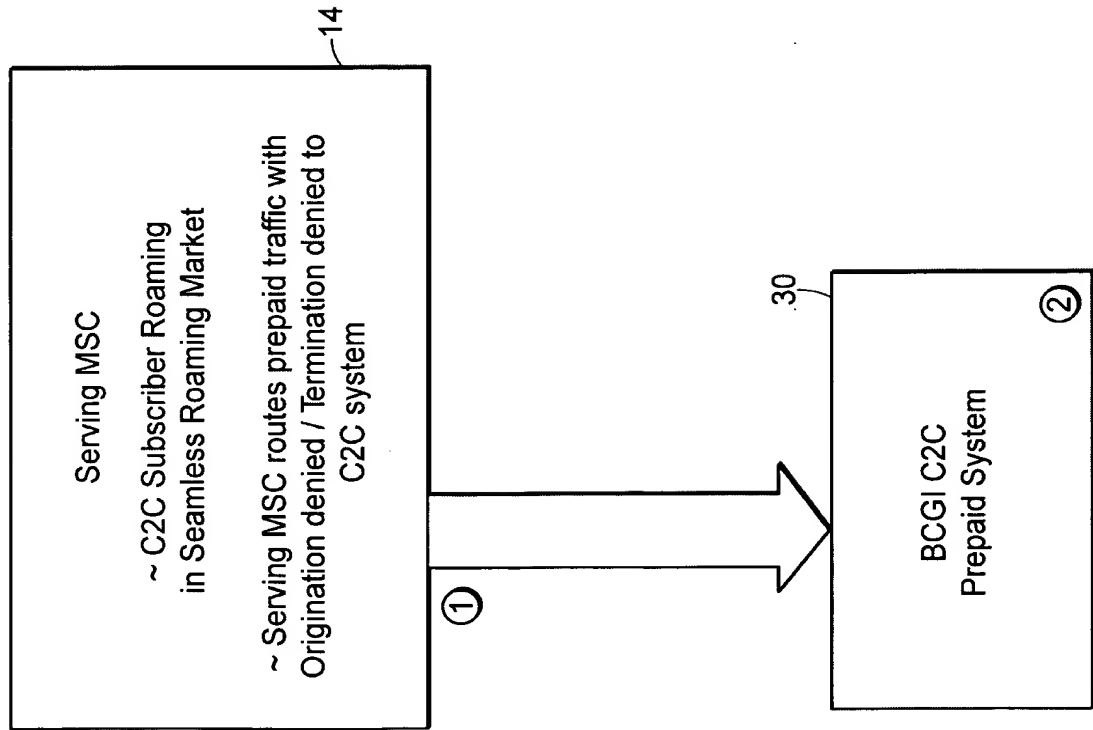


FIG. 3

- ① C2C roamer requests registration in servicing MSC. Serving MSC requests caller's roaming profile from BLR based on prepaid NPA/NXX
- ② BLR requests caller's roaming profile from the HLR
- ③ HLR returns roamer profile and then stores the subscriber's location
- ④ The BLR will determine the Class of Market for the serving market. If it is a Hotline Roaming market, the BLR will return "Origination via hotline# & term. denied" to the serving MSC. If it is a Seamless Roaming market, the BLR will return "Origination denied and Termination denied" to the serving MSC.
- ⑤ BLR returns roamer profile to serving MSC.

Roaming Call Origination Model (Seamless Roaming Market)



- ① C2C roamer requests Call Origination in serving Seamless Roaming Market. Serving MSC looks up roamer profile in VLR and sends Origination Denied call to prepaid voice node.
- ② C2C system processes call.

FIG. 4

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Roaming Call Origination Model (Hotline Roaming Market)

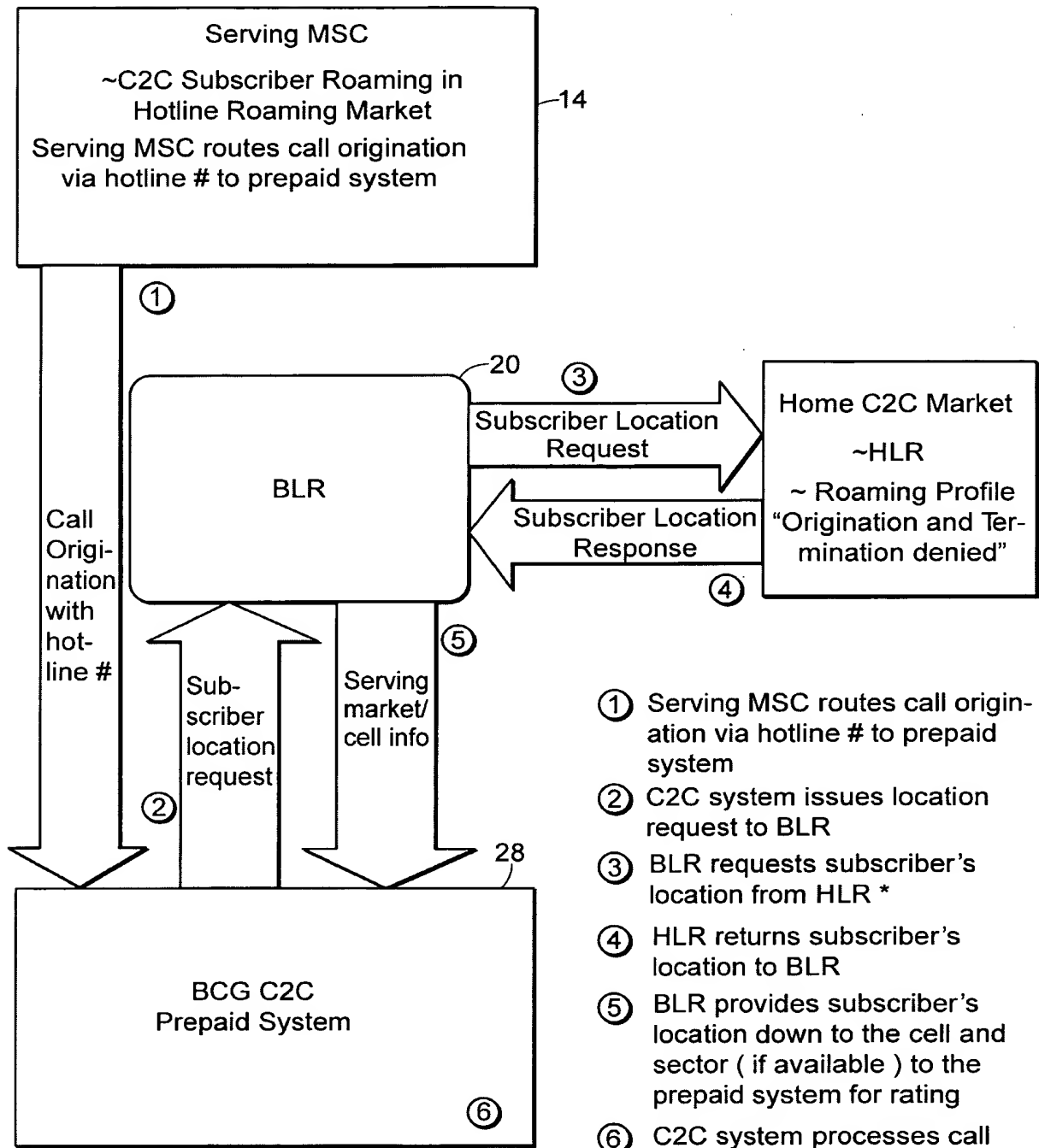


FIG. 5

- ① Serving MSC routes call origination via hotline # to prepaid system
- ② C2C system issues location request to BLR
- ③ BLR requests subscriber's location from HLR *
- ④ HLR returns subscriber's location to BLR
- ⑤ BLR provides subscriber's location down to the cell and sector (if available) to the prepaid system for rating
- ⑥ C2C system processes call

* Assuming the HLR stores the subscriber's location with Term. Denied; if not, then the BLR will need to store the subscriber's location

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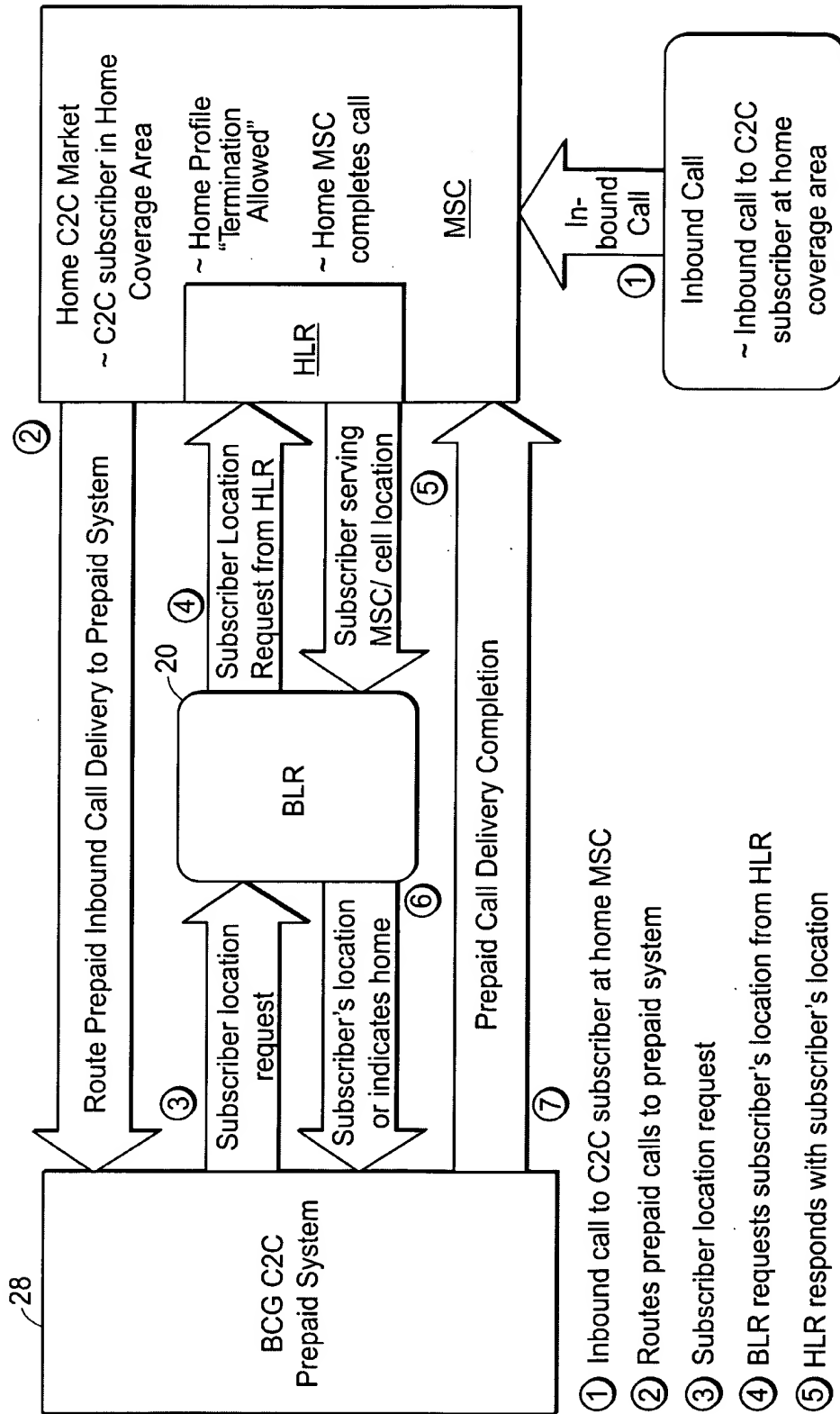


FIG. 6

- ① Inbound call to C2C subscriber at home MSC
- ② Routes prepaid calls to prepaid system
- ③ Subscriber location request
- ④ BLR requests subscriber's location from HLR
- ⑤ HLR responds with subscriber's location
- ⑥ BLR provides subscriber's location to the prepaid system **
- ⑦ Home MSC completes call

** Assumes the C2C system determines that the subscriber's location is the subscriber's home market

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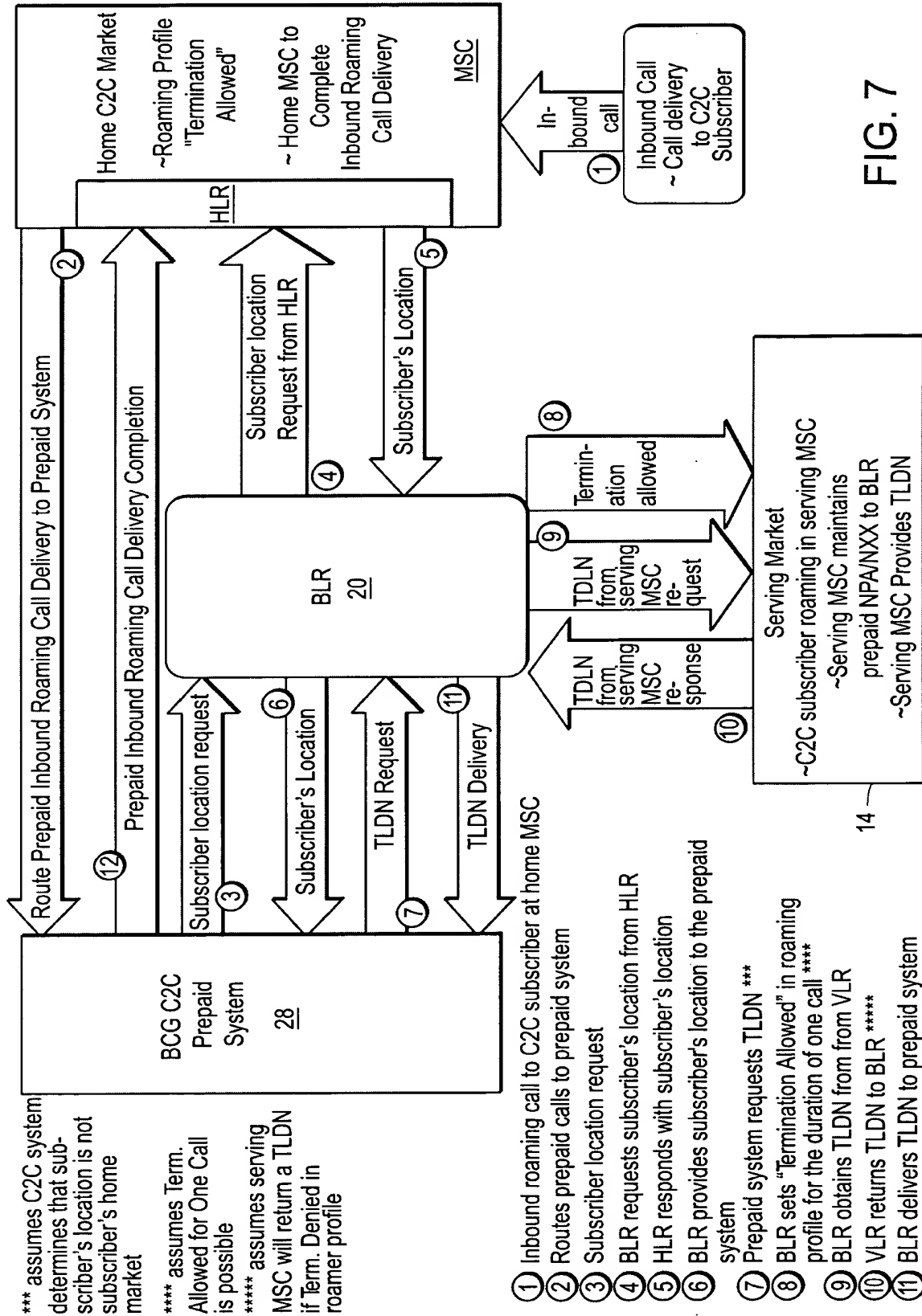


FIG. 7